



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/826,073

04/16/2004

Paul A. Lindberg

83714.86249

9970

24335 7590 03/27/2007
WARNER NORCROSS & JUDD LLP
900 FIFTH THIRD CENTER
111 LYON STREET, N.W.
GRAND RAPIDS, MI 49503-2487

EXAMINER

OKEZIE, ESTHER O

ART UNIT

PAPER NUMBER

3652

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/826,073	Applicant(s) LINDBERG, PAUL A.	
	Examiner Esther O. Okezie	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,5,7-13 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,5,7-13 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The amendment filed on 1/16/2007 and the remarks presented therewith have carefully considered. Applicant's arguments with respect to the claims have been considered but are not persuasive.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 2,4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0790211 in view of Hultquist US 5,050,921.

EP 0790211 discloses a device for lifting/manipulating objects comprising: a first arm (1) having an upper portion, a pivot portion and a lower portion, said upper portion of said first arm and said lower portion of said first arm extending in a common plane; a second arm (2) having an upper portion, a pivot portion and a lower portion, said pivot portion of said first arm pivotally connected to said pivot portion of said second arm, said upper portion of said second arm and said lower portion of said second arm extending in said common plane; wherein at least one of said pivot portion of said first arm and said pivot portion of said second arm is offset from said common plane an amount selected such that said upper portion and said lower portion of said first arm

Art Unit: 3652

and said upper portion and said lower portion of said second arm extend in said common plane (fig 1 and 2).

EP 0790211 discloses the lower portions of each arm follow a radius of curvature having a center on an interior side of the arms. The lower portions of the arms follow an "S" shape and open outwardly but the upper portions are flat. However, EP 0790211 does not disclose the upper portions of the arms following a radius of curvature having a center on an exterior side of the arms so that the arms have a somewhat "S" shape having a lower portion extending along a radius of curvature opening inwardly and an upper portion extending along a radius of curvature opening outwardly. Hultquist discloses a tong-type clamp in which the upper and lower portions of both arms (12,14) have a somewhat "S" shape having a lower portion extending along a radius of curvature opening inwardly and an upper portion extending along a radius of curvature opening outwardly (see figs 1 and 5). It would have been obvious to one of ordinary skill at the time of the invention to provide the arms of EP 0790211 with an "S" shaped configuration so that the arms could pivot to a wider position to extend around larger items (Hultquist: col. 1, lines 64-67 provides motivation for this arm shape).

2. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 0790211 and Hultquist as applied to claims 2,4, and 5 above, and further in view of in view of Eckert US 1,468,344.

3. Re claim 7, EP 0790211 discloses a first jaw (12,13) affixed to the first arm (1) , said jaw extending substantially perpendicularly to a longitudinal extent of said first arm

Art Unit: 3652

(fig 1). However, the combination does not disclose the jaw including a plurality of teeth. Eckert teaches a pipe lifting tongs with teeth (16) oriented around a curve of the jaws (14). It would have been obvious to one of ordinary skill in the art to modify the jaws of EP 0790211 to include teeth in order to more suitably secure objects from slipping during transport.

4. Re claim 8, the combination does not disclose the jaw including a plurality of teeth oriented along a radius of curvature having a center on an interior side of said first arm. Eckert teaches a pipe lifter with teeth (16) oriented around the inside curve of the jaws (14). It would have been obvious to one of ordinary skill in the art to modify the jaws of EP 0790211 as taught by Eckert to include teeth arranged about a curve in order to grasp round objects and more securely retain objects that would slip between linearly arranged teeth.

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 0790211 and Hultquist in view of Eckert as applied to claims 7 and 8 above, and further in view of Japanese Patent JP 05286682 A.

6. Re claim 9, the combination does not disclose a jaw manufactured from a segment of angle iron having a first leg and a second leg and said plurality of teeth being defined on said first leg. Eckert discloses the jaw with only one leg (14) extending from the arm of the pipe lifter. Japanese Patent JP 05286682 A discloses the device wherein said jaws are angled having a first leg (8a) and a second leg (11a), said plurality of teeth (12a) being defined in said first leg (fig 6). It would have been obvious

Art Unit: 3652

to one of ordinary skill in the art to modify the combination to form the jaws in two parts in order to provide a support to reinforce the jaw base. It is unclear whether Japanese Patent JP 05286682 A discloses the jaws as manufactured from iron. However, it would be obvious to one of ordinary skill in the art to manufacture jaws from iron because iron is well known in the art and readily available.

7. Re claim 10, EP 0790211 discloses the arms (1,2) moveable between a first fully open position and a second closed position wherein said first jaw and said second jaw are mounted to said first arm and said second arm such that said first leg of said jaw and said first leg of said second jaw extend along a substantially horizontal plane when said arms are in said fully open position (fig. 1; abstract).

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 0790211, Hultquist, and Eckert, and in view of Japanese Patent JP 05286682 A as applied to claim 9, above and further in view of Cook US 5,056,845. The combination does not disclose a pair of reinforcing plates interconnected between first jaw and said first arm, the reinforcing plates being disposed on opposite sides of said first arm and said reinforcing plates extending between said second leg and said first arm. Cook teaches a material manipulator tong including first arm webs (24,25) arranged in substantially the same manner as the present invention in the form of plates formed at acute angles connected to the lower first arm and the jaw (column 4, lines 3-10; figs 3 and 4). It would have been obvious to

Art Unit: 3652

one of ordinary skill in the art to add reinforcing plates to the jaws of the combination in order to strengthen the jaws against failing when lifting heavier objects.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 0790211 and Hultquist as applied to claim 1 above, and further in view of Dickey et al. It is not clear whether EP 0790211 discloses handles mounted on the lower portion of the arms, however reference 44 on the lower section of arm (2) appears to be a handle. EP 0790211 does not disclose a handle mounted to each of said arms, positioned perpendicular to said common plane. Dickey et al. teaches a tong device including handles (93 and 95) mounted on the lower section of both arms and perpendicular to the common plane of both arms (fig 9). It would have been obvious to one of ordinary skill in the art to modify EP 0790211 to include auxiliary handles in order to provide an alternate manner of opening the arms in case they become locked.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0790211 in view of Eckert. EP 0790211 discloses a device for lifting/manipulating objects comprising: a first arm (1) having an upper portion and a lower portion; a second arm (2) having an upper portion and a lower portion; a pivot joint (3) pivotally interconnecting said first arm and said second arm, said pivot joint configures such that said upper portion and said lower portion of said first arm and said upper portion and said lower portion of said second arm extend in a common plane (fig 2); a lift ring (see ring above shackles; a first and second shackle (10,11); and a second shackle

Art Unit: 3652

interconnecting said second arm to said lift ring (fig 1); a first jaw (12) affixed to said first arm, said first jaw extending substantially perpendicular to the longitudinal extent of said first arm; a second jaw (13) affixed to said second arm, said second jaw extending substantially perpendicular to the longitudinal extent of said first arm.

EP 0790211 does not disclose the jaws including a plurality of teeth oriented along a curve. Eckert teaches a pipe lifter with teeth (16) oriented around the inside curve of the jaws (14). It would have been obvious to one of ordinary skill in the art to modify the jaws of EP 0790211 as taught by Eckert to include teeth arranged about a curve in order to grasp round objects and more securely retain objects that would slip between linearly arranged teeth.

11. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 0790211 and Eckert as applied to claim 16 above and further in view of Japanese Patent JP 05286682 A.

12. Re claim 17, the combination does not disclose a jaw manufactured from a segment of angle iron having a first leg and a second leg and said plurality of teeth being defined on said first leg. Eckert discloses the jaw with only one leg (14) extending from the arm of the pipe lifter. Japanese Patent JP 05286682 A discloses the device wherein said jaws are angled having a first leg (8a) and a second leg (11a), said plurality of teeth (12a) being defined in said first leg (fig 6). It would have been obvious to one of ordinary skill in the art to modify the combination to form the jaws in two parts in order to provide a support to reinforce the jaw base. It is unclear whether Japanese

Art Unit: 3652

Patent JP 05286682 A discloses the jaws as manufactured from iron. However, it would be obvious to one of ordinary skill in the art to manufacture jaws from iron because iron is well known in the art and readily available.

13. Re claim 18, EP 0790211 discloses the arms (1,2) moveable between a first fully open position and a second closed position wherein said first jaw and said second jaw are mounted to said first arm and said second arm such that said first leg of said jaw and said first leg of said second jaw extend along a substantially horizontal plane when said arms are in said fully open position (fig. 1; abstract).

14. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 0790211 and Eckert as applied to claim 16 above and further in view of Hultquist. EP 0790211 discloses the lower portions of each arm follow a radius of curvature having a center on an interior side of the arms. The lower portions of the arms follow an "S" shape and open outwardly but the upper portions are flat. However, EP 0790211 does not disclose the upper portions of the arms following a radius of curvature having a center on an exterior side of the arms so that the arms have a somewhat "S" shape having a lower portion extending along a radius of curvature opening inwardly and an upper portion extending along a radius of curvature opening outwardly. Hultquist discloses a tong-type clamp in which the upper and lower portions of both arms (12,14) have a somewhat "S" shape having a lower portion extending along a radius of curvature opening inwardly and an upper portion extending along a radius of curvature opening outwardly (see figs 1 and 5). It would have been obvious to

Art Unit: 3652

one of ordinary skill at the time of the invention to provide the arms of the combination with an "S" shaped configuration so that the arms could pivot to a wider position to extend around larger items (Hultquist: col. 1, lines 64-67 provides motivation for this arm shape).

15. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 0790211, Eckert, and Hultquist as applied to claim 19 above, and further in view of Dickey et al. It is not clear whether EP 0790211 discloses handles mounted on the lower portion of the arms, however reference 44 on the lower section of arm (2) appears to be a handle. EP 0790211 does not disclose a handle mounted to each of said arms, positioned perpendicular to said common plane. Dickey et al. teaches a tong device including handles (93 and 95) mounted on the lower section of both arms and perpendicular to the common plane of both arms (fig 9). It would have been obvious to one of ordinary skill in the art to modify EP 0790211 to include auxiliary handles in order to provide an alternate manner of opening the arms in case they become locked.

Response to Arguments

Applicant's arguments filed 1/16/2007 have been fully considered but they are not persuasive. Applicant has argued against the physical combination of the references. In response, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary

Art Unit: 3652

reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Applicant has argued there is no motivation to combine the reference of EP 0790211 "Caille" with Hultquist because the "...modification of Hultquist to include an offset pivot location, like Caille, would destroy its intended function" because of various cam members, etc. In response, it appears Applicant has read the rejection in error. The primary reference of Caille discloses the lower portion of the arms have a radius of curvature, while the upper portions do not. Hultquist provides both the upper and lower arms having a curved or "S" like formation as claimed. Caille is modified by Hultquist not the alternative. The cam members of Hultquist have nothing to do with the rejection. Simply put, the teaching of "S" shaped arms is provided by Hultquist and consequently known in the art.

Applicant has argued, "...the modification of Caille to include an Eckert jaw would destroy the jaw's intended function" because the Eckert jaws are set completely off to one side of the arms. In response, the modification of Caille simply describes modifying the jaws 12 and 13 of Caille with the toothed jaws of Eckert. The modification has nothing to do with the arms or function of the tongs of Eckert only the jaws and teeth provided by the Eckert references.

Applicant has provided a lengthy discussion including arguments about the bodily incorporation of the arms of each of tongs applied with the primary references EP

Art Unit: 3652

0790211 and furthermore how these arms would not function with the device of EP 0790211. In response, the references applied do not describe replacing the arms and functioning of the device of the primary reference with those of a secondary reference. Simply, Eckert teaches a curved jaw with teeth, Japanese Patent JP 05286682 A teaches a bracketed two piece jaw with teeth, Dickey et al teaches placing handles on the arms, Cook teaches angled reinforcement plates on the jaw, and Hultquist teaches an "S" shaped upper arm.

Applicant has argued that the devices provided in the rejection serve different purposes than the present invention. In response, every reference applied is a tong device for lifting objects, just as the present invention; despite the fact that the objects lifted are pipes, concrete blocks, railroad timber, or manhole tops.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3652

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esther O. Okezie whose telephone number is (571) 272-8108. The examiner can normally be reached on Mon-Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EOO 3/19/07


GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER